ITED STATES ENVIRONMENTAL PROTECTION AGENCY 17629

DATE: February 6, 1980

SUBJECT: Site Inspection - Chemical Recovery, February 5, 1980
Elyria, Ohio

FROM: Eugene Meyer, Ph.D., Chemist EM

TO: Jay Goldstein, Chief
Hazardous Waste Management Section

Leon Acierto, Melannie Stopfer, and I joined Frank Biros of the National Task Force to assess the environmental hazards at this site. We met Jim Freeman, the general owner and operator of this facility, who indicated that distillation of solvents is the primary operation of his business. The site is approximately 3 acres in size and contains 3 major buildings (one warehouse and two buildings containing stills). The property is adjacent to the Black River. Outside of the building are stored about 3,000 drums, 800 of which purportedly contain flammable spent solvents and the remainder either empty or partially filled with still bottoms or sludge. Mr. Freeman indicated that this was a very small inventory, and that this is the slow season. He indicated that the inventory is generally much larger in total volume. The drums on site were stored relatively neatly in groups of 50 to 200 drums per group. Each group was accessible by means of a driveway. There was no indication of incompatible chemical storage, and only two leaking drums were detected. About 200 drums of isopropyl alcohol are being stored in close proximity to the river bank. Other drums containing dried paint sludge are also close to the river bank. Some of these are so close that they could easily fall into the river. The drums on site are generally stored directly on the soil only two or three high. The drums contain such flammable liquids as aliphatic and aromatic hydrocarbons, esters, ketones, (including chlorinated hydrocarbons), alcohols, and silones. Specific examples are Xylene, and methyl ethyl ketone. It is my professional opinion that the drums are being stored in compliance with the NFPA "Flammable and Combustible Liquids Code."

On the other hand poor environmental practices are apparent in both buildings where stills are housed. The still near the river can only be described as a primitive operation. Chemical residue was observable on the concrete floors in both buildings and the odor of methyl ethyl ketone was particularly obvious in and outside the building where this solvent was being distilled. The flammable range of this material is between 1.8 and 11.5%; its flash point is 22° F. Exposed to an ignition source, MEK can readily ignite under these conditions.

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It is also possible to observe a chemical waste material oozing from the river bank into the river. Since the river was frozen, the chemical waste lays as a brownish oil on top of the ice. Absorbent pads were being used to soak up the residue.

It was impossible to access potential damage to the soil, since it was covered by snow. Several samples were taken to access potential soil contamination.

It is my opinion that there are four corrections which must be made at this site:

1) The chemical waste oozing into the river must be stopped;

2) The concentration of organic vapor from the stills must be reduced to acceptable levels;

3) An environmentally acceptable plan must be adopted to account for spillage of solvents.

4) The sludge material in drums near the river bank should be removed, preferably off-site.